TABLE 1.4-1 Outline of Experimental Designs Described in this Book

Experimental Design	*Abbreviated Designation*
I. Systematic Designs	
II. Randomized Designs	
A. Complete Block Designs	
1. Completely randomized design	CR-k*
2. Randomized block design	RB-k
3. Latin square design	LS-k
4. Graeco-Latin square design	GLS-k
5. Hyper-Graeco-Latin square design	HGLS-k
B. Incomplete Block Designs	
1. Balanced incomplete block design	BIB-t
2. Youden square balanced incomplete block design	YBIB-t
3. Partially balanced incomplete block design	PBIB-t
C. Factorial Experiments	
1. Completely randomized factorial design	CRF-pq
2. Randomized block factorial design	RBF-pq
3. Completely randomized hierarchal design	CRH-$p(q)$
4. Completely randomized partial hierarchal design	CRH-$p(q)r$
5. Split-plot design	SPF-$p \cdot q$
6. Randomized block completely confounded factorial design	RBCF-p^k
7. Randomized block partially confounded factorial design	RBPF-p^k
8. Latin square completely confounded factorial design	LSCF-p^k
9. Completely randomized fractional factorial design	CRFF-p^k
10. Randomized block fractional factorial design	RBFF-p^k
11. Latin square fractional factorial design	LSFF-p^k
12. Graeco-Latin square fractional factorial design	GLSFF-p^k
D. Analysis of Covariance Experiments	
1. Completely randomized analysis of covariance design	CRAC-k
2. Randomized block analysis of covariance design	RBAC-k
3. Latin square analysis of covariance design	LSAC-k
4. Completely randomized factorial analysis of covariance design	CRFAC-pq
5. Split-plot factorial analysis of covariance design	SPFAC-$p \cdot q$

*The letter(s) following the dash designates the number and levels of each treatment. Refer to chapters in which the designs are discussed for an explanation of the abbreviated designations.

categories, factorial experiments and analysis of covariance experiments. The former pseudocategory is so designated because a factorial experiment consists of a combination of elementary building block designs. The term factorial experiment refers to the simultaneous evaluation of two or more treatments in one experiment rather than to a distinct kind of experimental design. Analysis of covariance experiments combine building block designs with regression analysis procedures and thus do not represent a distinct type of design. A brief description of some of the simpler designs follows.

COMPLETELY RANDOMIZED DESIGN

The simplest complete block experimental design from the standpoint of assignment of subjects to treatment levels and statistical analysis